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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,884	12/27/2001	Kazuyoshi Kuwahara	04329.2711	1870
22852	7590	05/17/2005	EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			HSU, ALPUS	
			ART UNIT	PAPER NUMBER
			2665	

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/026,884

Applicant(s)

KUWAHARA, KAZUYOSHI

Examiner

Alpus H. Hsu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-11 is/are rejected.
- 7) ☒ Claim(s) 7 and 12 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/27/01, 7/5/02, 4/8/03</u> | 6) <input type="checkbox"/> Other: ____ |

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1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
2. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 10, line 3, it is confusing for reciting "a detecting unit". Is it referring to the same detecting unit as recited in claim 9, line 4?

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5, 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over KARLSSON et al. in U.S. Patent No. 5,898,928 in view of SCHROEDER et al. in U.S. Patent No. 6,700,875.

Referring to claims 1, 2, 9 and 10, KARLSSON et al. discloses a method and apparatus for performing wireless communication using a plurality of frequency channels, the method comprising: detecting an error rate of each of a plurality of frequency channels used by wireless communication (col. 9, lines 21-32); determining higher than a specific threshold value (col. 9, lines 33-48); and initiating a forced exchange of the selected frequency channel and the best qualified candidate frequency channel (col. 8, lines 44-48, col. 9, lines 48-55) as claimed.

KARLSSON et al. differs from the claims, it does not disclose the features of suspending use of frequency channel whose error rate determined to be higher than specific threshold value

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and resuming use of the frequency channel under suspension when the detected error rate is lower than that of another frequency channel in use, which are well known in the art and commonly used in wireless communications field for frequency channel reuse purpose.

SCHROEDER et al., for example, from the similar field of endeavor, teaches the suspension and resuming of the frequency channel when its error rate is determining to be higher than a specific threshold value (col. 3, lines 53-56, col. 3, line 61 to col. 4, line 4, col. 6, lines 42-51), which can be easily adopted by one of ordinary skill in the art to implement into the method and apparatus in KARLSSON et al. for frequency channel reuse purpose to further improve the system efficiency for optimizing frequency channel selection.

Referring to claims 3 and 4, KARLSSON et al. differs from the claims, it does not disclose the features selecting a frequency channel whose error rate is to be detected such that the error rates of the plurality of frequency channels are detected in order of decreasing or increasing frequency, which is well within the level of ordinary skill in the art to implement into the method in KARLSSON et al. as design choice.

Referring to claim 5, SCHROEDER et al. teaches a master-slave scheme (col. 6, lines 42-51) for the wireless communication.

5. Claims 6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over KARLSSON et al. in U.S. Patent No. 5,898,928 in view of SCHROEDER et al. in U.S. Patent No. 6,700,875 as applied to claims 1 and 9 above, and further in view of OHASHI et al. in U.S. Patent No. 6,240,126.

Referring to claims 6 and 11, the method and apparatus provided from the teaching of KARLSSON et al. in view of SCHROEDER et al. differs from the claims, in that, it does not

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disclose the wireless communication being spread spectrum-frequency hopping communication, which is well known wireless communication environment.

OHASHI et al., for example, from the similar field of endeavor, teaches the use of spread spectrum-frequency hopping communication environment (col. 5, lines 58-62), which can be easily adopted by one of ordinary skill in the art into the method and apparatus provided from the teaching of KARLSSON et al. in view of SCHROEDER et al. to provide the same compatible system to meet the requirement of the communication environment as claimed.

6. Claims 7 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Freeburg, Klayman et al., Lysejko et al., Schwartzman et al., Kayama et al., Wright et al., and Kim et al. are all cited to show the common feature of wireless communication system utilizing bit error detection for optimum channel selection similar to the claimed invention.

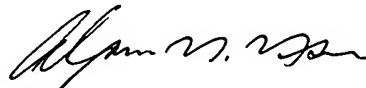
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alpus H. Hsu whose telephone number is (571)272-3146. The examiner can normally be reached on M-F (5:30-3:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D. Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AHH

A handwritten signature in black ink, appearing to read 'Alpus H. Hsu', is positioned above the printed name.

Alpus H. Hsu
Primary Examiner
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